

## CLAIMS

What is claimed is:

1        1. A method for preparing electronic data for transmission, comprising  
2 calculating a duration for compressing the electronic data, calculating a duration  
3 for transmitting the electronic data if not compressed, and compressing the  
4 electronic data only if the duration for compressing does not exceed the duration  
5 for transmitting.

1        2. The method of Claim 1, wherein calculating the duration for  
2 compressing the electronic data comprises calculating a duration for  
3 compressing a portion of the electronic data, and wherein compressing  
4 comprises compressing the portion of the electronic data only if the duration for  
5 compressing does not exceed the duration for transmitting.

1        3. The method of Claim 1, wherein calculating the duration for  
2 compressing includes calculating a combined duration for compressing and  
3 decompressing the electronic data and wherein compressing comprises  
4 compressing the electronic data only if the combined duration does not exceed  
5 the duration for transmitting.

1        4. The method of Claim 1, further comprising calculating a duration  
2 for transmitting the electronic data if compressed, and wherein compressing  
3 comprises compressing the electronic data only if the duration for compressing  
4 summed with the duration for transmitting the electronic data if compressed  
5 does not exceed the duration for transmitting the electronic data if not  
6 compressed.

1        5. The method of Claim 1, further comprising calculating a duration  
2 for transmitting the electronic data if compressed, and wherein calculating the  
3 duration for compressing includes calculating a combined duration for  
4 compressing and decompressing the electronic data, and wherein compressing

5 comprises compressing the electronic data only if the combined duration  
6 summed with the duration for transmitting the electronic data if compressed  
7 does not exceed the duration for transmitting the electronic data if not  
8 compressed.

1       6.     The method of Claim 1, wherein calculating the duration for  
2 transmitting the electronic data if not compressed includes identifying a transmit  
3 rate for a port through which the electronic data will be transmitted and  
4 calculating the duration according to the transmit rate for the port and a size of  
5 the electronic data.

1       7.     The method of Claim 1, wherein calculating the duration for  
2 transmitting the electronic data if not compressed includes:  
3           noting a transmit rate; and  
4           calculating the duration for transmitting the electronic data according to a  
5 size of the electronic data and the transmit rate.

1       8.     The method of Claim 7, wherein noting comprises measuring a  
2 duration for transmitting other electronic data, identifying a size of the other  
3 electronic data, and calculating the transmit rate based on the measured  
4 duration for transmitting the other electronic data and the identified size of the  
5 other electronic data.

1       9.     A method for preparing a print job containing raster data,  
2 comprising:  
3           calculating a duration for compressing the raster data;  
4           calculating a duration for transmitting the print job if the raster data is not  
5 compressed; and  
6           compressing the raster data only if the duration for compressing does not  
7 exceed the duration for transmitting.

1        10. The method of Claim 9, further comprising transmitting the print  
2 job to an image forming device.

1        11. The method of Claim 9, wherein calculating the duration for  
2 transmitting the print job includes identifying a transmit rate for a port through  
3 which the print job will be transmitted en route to an image forming device and  
4 calculating the duration according to the transmit rate for the port and a size of  
5 the print job.

1        12. The method of Claim 9, wherein calculating the duration for  
2 transmitting the print job includes:  
3            noting a transmit rate; and  
4            calculating the duration for transmitting the print job according to a size  
5 of the print job and the transmit rate.

1        13. The method of Claim 12, wherein noting comprises measuring a  
2 duration for transmitting a prior print job, identifying a size of the prior print job,  
3 and calculating the transmit rate for the prior print job based on the measured  
4 duration for transmitting the prior print job and the identified size of the prior  
5 print job.

1        14. The method of Claim 13, wherein measuring a duration comprises  
2 measuring a duration for transmitting the prior print job from a print queue to an  
3 image forming device.

1        15. A computer readable medium having instructions for calculating a  
2 duration for compressing electronic data, calculating a duration for transmitting  
3 the electronic data if not compressed, and compressing the electronic data only  
4 if the duration for compressing does not exceed the duration for transmitting.

1        16. The medium of Claim 15, wherein the instructions for calculating  
2 the duration for compressing the electronic data include instructions for  
3 calculating a duration for compressing a portion of the electronic data, and

4 wherein the instructions for compressing include instructions for compressing  
5 the portion of the electronic data only if the duration for compressing does not  
6 exceed the duration for transmitting.

1       17. The medium of Claim 15, wherein the instructions for calculating  
2 the duration for compressing include instructions for calculating a combined  
3 duration for compressing and decompressing the electronic data and wherein the  
4 instructions for compressing include instructions for compressing the electronic  
5 data only if the combined duration does not exceed the duration does  
6 transmitting.

1       18. The medium of Claim 15, further comprising calculating a duration  
2 for transmitting the electronic data if compressed, and wherein the instructions  
3 for compressing include instructions for compressing the electronic data only if  
4 the duration for compressing summed with the duration for transmitting the  
5 electronic data if compressed does not exceed the duration for transmitting the  
6 electronic data if not compressed.

1       19. The medium of Claim 15, further comprising calculating a duration  
2 for transmitting the electronic data if compressed, and wherein the instructions  
3 for calculating the duration for compressing include instructions for calculating a  
4 combined duration for compressing and decompressing the electronic data, and  
5 wherein the instructions for compressing include instructions for compressing  
6 the electronic data only if the combined duration does summed with the duration  
7 for transmitting the electronic data if compressed does not exceed the duration  
8 for transmitting the electronic data if not compressed.

1       20. The medium of Claim 15, wherein the instructions for calculating  
2 the duration for transmitting the electronic data if not compressed include  
3 instructions for identifying a transmit rate for a port through which the electronic  
4 data will be transmitted and calculating the duration according to the transmit  
5 rate for the port and a size of the electronic data.

1           21. The medium of Claim 15, wherein the instructions for calculating  
2 the duration for transmitting the electronic data if not compressed include  
3 instructions for:

4           noting a transmit rate; and  
5           calculating the duration for transmitting the electronic data according to a  
6 size of the electronic data and the transmit rate.

1           22. The medium of Claim 21, wherein the instructions for noting  
2 include instructions for measuring a duration for transmitting other electronic  
3 data, identifying a size of the other electronic data, and calculating the transmit  
4 rate for the other electronic data based on the measured duration for  
5 transmitting the other electronic data and the identified size of the other  
6 electronic data.

1           23. A computer readable medium having instructions for:  
2           calculating a duration for compressing the raster data;  
3           calculating a duration for transmitting a print job if the raster data is not  
4 compressed; and  
5           compressing the raster data only if the duration for compressing does not  
6 exceed the duration for transmitting.

1           24. the medium of Claim 23, having further instruction for transmitting  
2 the print job to an image forming device.

1           25. The medium of Claim 23, wherein the instructions for calculating  
2 the duration for transmitting the print job include instructions for identifying a  
3 transmit rate for a port through which the print job will be transmitted en route  
4 to an image forming device and calculating the duration according to the  
5 transmit rate for the port and a size of the print job.

1        26. The medium of Claim 23, wherein the instructions for calculating  
2 the duration for transmitting the print job include instructions for:  
3            noting a transmit rate; and  
4            calculating the duration for transmitting the print job according to a size  
5 of the print job and the transmit rate.

1        27. The medium of Claim 26, wherein the instructions for noting  
2 include instructions for measuring a duration for transmitting a prior print job,  
3 identifying a size of the prior print job, and calculating the transmit rate for the  
4 prior print job based on the measured duration for transmitting the prior print job  
5 and the identified size of the prior print job.

1        28. The medium of Claim 27, wherein the instructions for measuring a  
2 duration include instructions for measuring a duration for transmitting the prior  
3 print job from a print queue to an image forming device.

1        29. A system for preparing a print job containing raster data,  
2 comprising:  
3            a bandwidth module operable to supply data relating to a transmit rate for  
4 the print job;  
5            a duration module operable to calculate a duration for compressing the  
6 raster data and to calculate, based on a transmit rate supplied by the bandwidth  
7 module, a duration for transmitting the print job if the raster data is not  
8 compressed; and  
9            a compression selector operable to instruct that the raster data be  
10 compressed only if the duration for compressing does not exceed the duration  
11 for transmitting.

1        30. The system of Claim 29, wherein one or more of the bandwidth  
2 module, duration module, and the compression selector are programming  
3 elements of a print driver.

1           31. The system of Claim 29, wherein the bandwidth module is  
2 operable to supply data identifying a port through which the print job will be  
3 transmitted en route to an image forming device, and wherein the duration  
4 module is operable to calculate the duration for transmitting the print job by  
5 identifying a transmit rate for the port and calculating the duration according to  
6 the transmit rate for the port and a size of the print job.

1           32. The system of Claim 29, wherein the bandwidth module is  
2 operable to identify a port through which the print job will be transmitted,  
3 identify an assumed transmit rate for that port, and supply the duration module  
4 with the assumed transmit rate.

1           33. The system of Claim 29, wherein the bandwidth module is  
2 operable to supply a transmit rate for a prior print job, and wherein the duration  
3 module is operable to calculate the duration for transmitting the print job  
4 according to a size of the print job and the transmit rate of the prior print job.

1           34. The system of Claim 33, wherein the bandwidth module is  
2 operable to measure a duration for transmitting the prior print job, identify a size  
3 of the prior print job, and calculate the transmit rate for the prior print job based  
4 on the measured duration for transmitting the prior print job and the identified  
5 size of the prior print job.

1           35. The system of Claim 34, wherein the bandwidth module is  
2 operable to measure the duration by measuring a duration for transmitting the  
3 prior print job from a print queue to an image forming device.

1           36. A print server, comprising:  
2           a print queue;  
3           a queue manager operable to administer print jobs in a print queue;  
4           a bandwidth module operable to supply data relating to a transmit rate for  
5           a print job;

1           a duration module operable to calculate a duration for compressing the  
2   raster data and to calculate, based on a transmit rate supplied by the bandwidth  
3   module, a duration for transmitting the print job if the raster data is not  
4   compressed; and

5           a compression selector operable to instruct the queue manager to  
6   compress the raster data only if the duration for compressing does not exceed  
7   the duration for transmitting.

1       37. A system for preparing electronic data for transmission,  
2   comprising:

3           a means for calculating a duration for compressing the electronic data;  
4           a means for calculating a duration for transmitting the electronic data if  
5   not compressed; and  
6           a means for compressing the electronic data only if the duration for  
7   compressing does not exceed the duration for transmitting.

1       38. A system for preparing a print job containing raster data,  
2   comprising:

3           a means for supplying data relating to a transmit rate for the print job;  
4           a means for calculating a duration for compressing the raster data;  
5           a means for calculating a duration for transmitting the print job if the  
6   raster data is not compressed; and  
7           a means for instructing that the raster data be compressed only if the  
8   duration for compressing does not exceed the duration for transmitting.

1       39. The system of Claim 38, wherein the means for supplying is a  
2   means for supplying data relating to a port through which the print job will travel  
3   en route to an image forming device.

1       40. The system of Claim 38, wherein the means for supplying is a  
2   means for supplying a transmit rate for a prior print job.